

What is claimed is:

1. A telephone service system using a voice over internet protocol (VoIP) based on a network, comprising:

5 a communication network connecting plural undefined communication lines to carry out voice and data communications therebetween;

plural user terminals for carrying out communication connections with an external of providing VoIP services through the communication network, outputting to the external a purchase request signal of a specific VoIP number to be purchased by a company or an individual user according to form data provided from the external, inputting data regarding whether the sale of the VoIP number the user requests from the external is approved or rejected, purchasing the corresponding VoIP number by paying a certain amount to the external in case that the sale is approved, carrying out a member registration by outputting to the external member registration data including the VoIP number purchased by the company or individual user, a contactable PSTN number (or identification number), and a VoIP number of a different company, which the company or individual user inputs according to the form data provided by the external, and, if the user inputs either of a VoIP number, a PSTN number (or identification number), and a VoIP number of a different company for a party to whom the user wants to telephone-service, performing a telephone service through the VoIP with the party to be telephone-served through the communication network according to a control of the external; and

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a server computer for globalizing VoIP numbers to be sold to individuals or companies to generate a unified number system,

outputting data regarding various information and VoIP number sales for a VoIP service to a specific user terminal which has performed a communication connection through the communication network, outputting predetermined form data for VoIP number sales and a member registration according to a request of a user terminal, if a specific VoIP number and a sale request signal to be purchased from the user terminal are inputted, confirming whether the sale of the corresponding VoIP number can be sold and outputting to the corresponding user terminal data regarding whether the sale of the specific VoIP number is approved or rejected, selling the specific VoIP number the corresponding user requests if a purchase amount for the specific VoIP number sale-approved from the corresponding user terminal, inputting the VoIP number purchased by the company or individual user from the user terminal, a contactable PSTN number(or identification number), and a VoIP number of a different company and performing the member registration, if a VoIP number of a party user to be telephone-serviced from the user terminal is inputted, routing the VoIP number to a communication center at a corresponding country(area) and controlling to be telephone-serviced with the party user, and, if a general PSTN number(or identification number) or a VoIP number provided by a different company of a party user to be telephone-serviced from the user terminal is inputted, performing call switching of the VoIP number of the user to meet a number system of the corresponding country or a VoIP number system of a different company, routing the call-switched VoIP number to a communication center at a corresponding country(area) or to a PSTN network, and controlling to be telephone-serviced with the party user.

2. The telephone service system as claimed in claim 1, wherein the user terminal is internet phones, PSTN phones, personal computers, hand-held phones, PDAs, and internet-accessible terminals.

3. The telephone service system as claimed in claim 1, wherein the server computer, if either of a VoIP number, a PSTN number(or identification number), and a VoIP number of a different company of a party to be telephone-serviced is inputted from a specific user terminal registered as a member, even though the party user is not registered as a member in the server computer, provides a service for performing a telephone service using the VoIP with the corresponding user through the call switching or the routing.

4. The telephone service system as claimed in claim 1, wherein the server computer, if a domain name or an electronic mail address rather than a VoIP number, a PSTN number(or identification number), and a VoIP number of a different company of a party to be telephone-serviced is inputted from a specific user terminal, performs call switching to a number corresponding to the domain name or the electronic mail address a company or an individual holds, and provides a service for performing a telephone service using the VoIP with a corresponding user.

5. The telephone service system as claimed in claim 1, wherein the server computer establishes different VoIP number systems by individuals or companies.

6. The telephone service system as claimed in claim 1, wherein the server computer establishes a VoIP number given to an individual in order of an area code(or identifier code), a general PSTN number(or identification number), and a country code.

7. The telephone service system as claimed in claim 1, wherein the server computer establishes a VoIP number given to a company in order of a general PSTN number(or identification number), a sharp symbol(#), and a country code.

5 8. The telephone service system as claimed in claim 7, wherein the server computer gives one worldwide identical number rather than numbers differently established country by country to the general PSTN number(or identification number) of the VoIP number given to the company, and, if different users input different country codes following a general PSTN number(or identification number) and the sharp symbol which is a country identifier, provides a service for performing a telephone service through the VoIP with a company located in a corresponding country.

9. The telephone service system as claimed in claim 1, wherein the server computer provides a flash card to a user who uses the VoIP service, and, if the corresponding user connects to a user terminal of enabling the VoIP telephone service anywhere in the world after inputting his ID in the flash card, provides a service capable of receiving the user's phone call from other users who request a
20 telephone service over the VoIP through the server computer.

10. The telephone service system as claimed in claim 1, wherein the server computer, in case of a company user, carries out a customers satisfaction process through a mother tongue service to customers, regardless of products sales and locations, in connection
25 with a customer relationship management(CRM) service of collecting and analyzing, at one time and at a center, information about other individual or company users who use telephone services through the

VoIP service by countries, regardless of separately collecting and analyzing, at communication centers by countries, information about other individual or company users who use the telephone services over the VoIP service through the communication centers installed country by country.

11. The telephone service system as claimed in claim 1, wherein the server computer, if a user of a hand-held phone, a PDA, or an internet-accessible terminal inputs a VoIP number given by individuals or companies, enables the user to use internet connection or e-mail services of the individual or the company given the corresponding VoIP number.

12. The telephone service method using a voice over internet protocol based on a network, comprising steps of:

(1) building communication centers by countries(areas) in a server computer which provides a telephone service through a VoIP, globalizing and generating to a unified system VoIP numbers to be sold to individuals or companies, and starting a VoIP service;

(2) outputting various information for the VoIP service and data regarding VoIP number sales to a specific user terminal of performing a communication connection through a communication network, and carrying out the sale of a specific VoIP number according to a request of a corresponding user;

(3) inputting the VoIP number a company or an individual purchases, a contactable PSTN number(or identification number), a VoIP number of a different company, and user's personal information for the use of the telephone service using the VoIP from the user terminal and carrying out a member registration for the use of the VoIP service;

and

(4) confirming whether a VoIP number, a general PSTN number(or identification number), and a VoIP number a different company provides of a party user are inputted from a specific user terminal for a telephone service with the party user, routing a VoIP number of a user to a communication center of a corresponding country(area) or performing call switching of the VoIP number of the user to meet a number system of the corresponding country and a VoIP number system a different company provides and then routing the call-switched VoIP number to a communication center of a corresponding country(area) or to a PSTN network, and performing the telephone service with the party user through the VoIP.

13. The telephone service method as claimed in claim 12, wherein the step(1) includes steps of:

(1-1) building communication centers at respective countries(areas) for routing a call signal when using the telephone service through the VoIP in the server computer;

(1-2) classifying by individuals or companies and globally establishing the VoIP number system in the server computer;

(1-3) building a system program for supporting the telephone service through the VoIP according to the VoIP number system established in classification by individuals or companies; and

(1-4) starting the VoIP service after building the system program according to the VoIP numbers by individuals or companies.

14. The telephone service method as claimed in claim 12, wherein the step(2) includes steps of:

(2-1) outputting various information for the VoIP service and

guidance data on VoIP number sales to a specific user terminal of performing a communication connection through the communication network in the server computer;

(2-2) judging whether purchase request data for purchasing the VoIP number is inputted from a corresponding user terminal which has confirmed the various information about the VoIP service;

(2-3) outputting, if the purchase request data is inputted, predetermined form data for inputting data necessary for the VoIP number sale;

(2-4) judging if a specific VoIP number to be purchased and the purchase request data are inputted from the corresponding user terminal;

(2-5) confirming whether the sale of a specific VoIP number to be requested is available in the server computer, and outputting to the corresponding user terminal data on whether the sale of the specific VoIP number to be requested by a user is approved or rejected;

(2-6) judging if data on a final purchase selection is inputted from the user terminal which has confirmed the data on the sale approval of the specific VoIP number;

(2-7) outputting the sale approval data to the corresponding user terminal which has selected the final purchase from the server computer, and requesting the settlement of a purchase amount for the specific VoIP number; and

(2-8) selling, if the purchase amount for the VoIP number sale-approved from the corresponding user is received, the specific VoIP number the corresponding user requests.

15. The telephone service method as claimed in claim 12, wherein the step(3) includes steps of:

(3-1) judging if a member registration for the use of the telephone service through the VoIP is requested from a user terminal to the server computer;

(3-2) outputting to a corresponding user terminal of requesting a member registration predetermined form data for inputting data necessary for the member registration;

(3-3) judging if member registration data including a VoIP number a company or an individual user purchases, a contactable PSTN number(or identification number), a VoIP number of a different company is inputted from a user terminal;

(3-4) storing member registration data including a VoIP number, a contactable PSTN number(or identification number), and a VoIP number of a different company, which are inputted from a corresponding user, in a database; and

(3-5) outputting to a corresponding user terminal data on a result of a performance of a member registration for using the VoIP service.

16. The telephone service method as claimed in claim 12, wherein the step(4) includes steps of:

(4-1) judging if either of a VoIP number of a party user, a PSTN number(or identification number), and a VoIP number of a different company for the use of a telephone service through the VoIP is inputted from a specific user terminal registered as a member;

(4-2) judging if a party user's number inputted from a specific user terminal is a VoIP number of a system provided from the server

computer;

(4-3) routing, if the party user's number inputted from the specific user terminal is a VoIP number of the system provided from the server computer, the user's VoIP number to a communication center of a corresponding country(area) to carry out a telephone service with the party user through the VoIP;

(4-4) judging whether the party user's number is a general PSTN number(or identification number) if the party user's number inputted from the specific user terminal is not a VoIP number of the system provided from the server computer as a result of the judgment of the step(4-2);

(4-5) performing call switching of a user's VoIP number, if a party user's number inputted from a specific user terminal is a general PSTN number(or identification number), to meet a PSTN number(or identification number) system of a corresponding country(area), routing the call-switched VoIP number to a PSTN network of the corresponding country(area) to carry out a telephone service with the party user through the VoIP;

(4-6) judging, if the party user's number inputted from the specific user terminal is not a general PSTN number(or identification number) as a result of the judgment of the step(4-4), whether the party user's number is a VoIP number of other companies; and

(4-7) performing the call switching of the user's VoIP number, if the party user's number inputted from the specific user terminal is a VoIP number of a different company, to meet a VoIP number system of the company to carry out an telephone service with the party user through the VoIP.

17. The telephone service method as claimed in claim 12 or claim 16, wherein the step(4), in case that a user registered as a member are telephone-serviced to a party user by using a general PSTN number(or identification number) or a VoIP number provided by a different company rather than a VoIP number provided by the server computer, receives costs according to a billing system from a corresponding user, pays corresponding costs to a PSTN network administrator or to a different VoIP company, to thereby enable the corresponding user to freely use the telephone service with a party user using a general PSTN number(or identification number) or a VoIP number a different company provides without a particular limitation.